

Claims:

1. An apparatus comprising:

an estimator adapted to predict an occurrences of a  
predetermined amplitude level in an in-phase and quadrature phase  
(I/Q) complex trajectory plane; and

a deflector which is adapted to deflect the I/Q complex  
trajectory from an origin of the I/Q complex trajectory plane according  
to an estimator prediction.

2. The apparatus of claim 1, wherein the deflector is adapted to receive  
samples of an I/Q data stream and deflect the I/Q complex trajectory  
of the I/Q data stream according to I/Q complex trajectory correctives  
parameters.

3. The apparatus of claim 2, wherein the estimator is adapted to receive  
at least two consecutive symbols of the I/Q data stream and  
determined whether or not to provide the I/Q complex trajectory  
correctives parameters according to at least two consecutive  
symbols.

4. The apparatus of claim 3, wherein the estimator adapted to provide  
the trajectory corrective parameters according to estimated distance  
between the origin of the complex trajectory plane to the I/Q complex  
trajectory.

5. The apparatus of claim 4, further comprising:  
an adjustable deflection window adapted to a weighting  
window.

6. A portable communication device comprising:

an estimator adapted to predict an occurrences of a predetermined amplitude level in an in-phase and quadrature phase (I/Q) complex trajectory plane.

- 5     7.     The portable communication device of claim 6 further comprising:  
         a deflector which is adapted to deflect the I/Q complex  
         trajectory from an origin of a complex trajectory plane according to  
         the estimator prediction.
- 10    8.     The portable communication device of claim 7, wherein the deflector  
         is adapted to receive samples of I/Q data stream and deflects the I/Q  
         complex trajectory of the I/Q data stream according to I/Q complex  
         trajectory correctives parameters.
- 15    9.     The portable communication device of claim 8, wherein the estimator  
         adapted to receive at least two consecutive symbols of the I/Q data  
         stream and to decide whether or not to provide the I/Q complex  
         trajectory correctives parameters according to at least two  
         consecutive symbols.
- 20    10.    The portable communication device of claim 9, wherein the estimator  
         adapted to provide the trajectory corrective parameters according to  
         adjustable deflection window.
- 25    11.    The portable communication device of claim 10, wherein the  
         adjustable deflection window is adapted to a weighting window.
12.    The portable communication device of claim 11, further comprises a  
         data source for providing the I/Q data stream and an antenna.

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13. The portable communication device of claim 11, further comprises an outphasing radio frequency (RF) amplifier with a reactive termination.

14. An apparatus comprising:

an estimator adapted to predict an occurrences of a predetermined amplitude level in an in-phase and quadrature phase (I/Q) complex trajectory plane which be deflected from an origin of a complex trajectory plane according to the estimator prediction.

15. The apparatus of claim 15 further comprising:

a channelization and spreading block which is operably coupled to a pulse shaping filter and to the estimator wherein the pulse shaping filter is operably coupled to the deflector;

an digital to analog converter which receive signals from the deflector and output signals to a filter; and

an upconverter which receives signals from the filter and adapted to upconvert the signals into a radio frequency signals.

16. The apparatus of claim 15, further comprises a sampler which receives an in-phase and quadrature (I/Q) phase data stream from the channelization and spreading block and adapted to provide samples of I/Q data stream to the estimator.

17. A method comprising:

predicting occurrence of a predetermined amplitude level in an in-phase and quadrature phase (I/Q) complex trajectory plane.

18. The method of claim 18 further comprising:

deflecting an I/Q complex trajectory from an origin of a complex trajectory plane according to a prediction.

19. The method of claim 18, wherein deflecting comprises:  
deflecting the I/Q complex trajectory of the I/Q data stream  
according to I/Q complex trajectory corrective parameters.

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20. The method of claim 19 wherein predicting comprises:  
deciding whether or not to provide to I/Q complex trajectory  
corrective parameters according to a data of at least two consecutive  
symbols of the I/Q data stream.

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21. The method of claim 20, further comprising:  
providing the trajectory corrective parameters according to  
adjustable deflection window.

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22. An article comprising: a storage medium having stored thereon  
instructions, that, when executed by a computing platform, results in:  
predicting occurrence of a predetermined amplitude level in an  
in-phase and quadrature phase (I/Q) complex trajectory plane; and  
deflecting an I/Q complex trajectory from an origin of a complex  
trajectory plane according to a prediction.

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23. The article of claim 22, wherein the instructions of deflecting result  
in:

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deflecting the I/Q complex trajectory of the I/Q data stream  
according to I/Q complex trajectory corrective parameters.

24. The article of claim 23 wherein instructions of predicting result in:  
deciding whether or not to provide to I/Q complex trajectory  
corrective parameters according to a data of at least two consecutive  
symbols of the I/Q data stream.

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